

## **REMARKS**

Claims 1-76 were pending. Claims 9 and 75 have been cancelled. Claims 1, 27, 44, 57 and 76 have been amended, and claims 77-82 have been added. Therefore, claims 1-2, 4-74 and 76-82 remain pending subsequent entry of the present amendment. Support for the amendments may be found in at least paragraphs 15 and 59.

## **Specification**

Paragraphs 85 and 131 of the specification have been amended to recite only subject matter fully supported by the original disclosure. In particular, paragraph 131 discloses the PCI Express Base specification 1.0 is a specification that does not include provisions for sharing I/O. This subject matter is not new and is expressly supported by at least paragraph 56 and original claim 3.

## **35 U.S.C. § 102 and § 103 Rejections**

Claims 1, 9-11, 13-19, 23, 25-26, 44, 48-49, 52-54, 56-57, 60, 69-73 and 75 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Publication No. 2002/0027906 (hereinafter "Athreya"). Claims 2-3, 12, 45-46, 51, 55, 61, 67-68, 74 and 76 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Athreya in view of U.S. Patent Publication No. 2004/0073716 (hereinafter "Boom"). Claims 4-8, 20-22, 24 and 47 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Athreya in view of U.S. Patent No. 6,823,458 (hereinafter "Lee"). Claims 27, 28, 31, 33, 34, 36-43, 58, 59 and 62 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Athreya in view of U.S. Patent Publication No. 2004/0202013 (hereinafter "Dove"). Claims 29-30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Athreya in view of Dove and in further view of U.S. Patent Publication No. 2003/0065822 (hereinafter "Avery"). Claims 32 and 35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Athreya in view of Dove and in further view

of Boom. Claims 63-64 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Athreya in view of U.S. Patent No. 6,731,649 (hereinafter “Silverman”). Finally, claims 50, 65 and 66 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Athreya in view of U.S. Patent No. 6,834,326 (hereinafter “Wang”). Applicant submits the present claims recite features neither disclosed nor suggested by the cited art. Accordingly, the rejections are traversed reconsideration in view of the following comments is requested.

Each of the claim rejections depends upon at least the Athreya reference. However, the system disclosed by Athreya differs from the claimed limitations of the invention. As discussed in Applicant’s previous Amendment, the nature of the presently claimed invention and the cited art is quite different. The present amendments are believed to clarify such differences. For example, claim 1 recites a shared fabric in a load/store domain which includes a plurality of root complexes, a shared I/O switch, and a shared I/O controller. Claim 1 further recites at least two of the root complexes do not include a dedicated network interface controller, and the controller is configured to be shared by the two root complexes. Athreya is readily distinguished from such a system in that Athreya is directed to IP based LAN and WAN networks. For example, Athreya discloses:

“... VLANs allow multiple community groups to coexist within one bridge. A bridging community is identified by its VLAN ID. As described in IEEE 802.1q standard, if a system that supports VLANs receives a frame from the LAN, the frame will only be admitted to a LAN which belongs to the same community.” (Athreya, paragraph 0002).

“FIG. 3A illustrates customer networks 74, 76 and 78. They are connected to routers 80, 82 and 84. The router sends IP frames according to the Point to Point Protocol to the unit 86. The WAN links to the unit 86 are such that the networks 74, 76 and 78 are associated with different input WAN logical interfaces for the unit 86 ... FIG. 3B illustrates the operation of VLAN tagging for the unit 86 shown in FIG. 3A ... A table within the tagging unit 94 is used to determine the destination medium access control address that is associated with the destination IP address of the IP packet in the payload. The source

MAC address, in the field 94b, is preferably constructed using spoofed source MAC address as described in the IP multiplexing method described below.” (Athreya, paragraph 0040).

“IP multiplexing is a method for the transparent forwarding of IP packets between a LAN and a WAN interface. LAN to LAN forwarding is accomplished through a proxy Address Request Protocol (ARP) process. A unit maps a unique spoofed MAC address to each WAN link and then responds with this spoofed MAC address when a device on the LAN broadcasts an ARP request for a remote device. These MAC addresses serves as tags for forwarding packets received on the LAN.” (Athreya, paragraph 0041) (emphasis added).

In such a system described above, dedicated network interface controllers are ubiquitous. On page 3 of the Office Action, it is suggested regarding prior claim 9 that none of the “root complexes” of Athreya include dedicated network controllers. However, the customer networks (52, 54, 56) of Athreya most certainly comprise dedicated network interface controllers. The Office Action references FIG. 2A and 3A of Athreya as disclosing these features. However, there is nothing in these figures or related description which discloses or suggests such features. Neither does the combination of cited art suggest such features. Accordingly, claim 1 is believed patentably distinguishable from the cited art for at least these reasons. Claims 27, 44, 57 and 72 are distinguishable for similar reasons.

In addition to the above, claims 77-82 recite the additional features wherein the root complexes are PCI Express root complexes. The customer networks (52, 54, 56) of Athreya are clearly not PCI Express root complexes. Therefore, the claims are readily distinguishable from the cited art as well, taken either singly or in combination.

Applicant believes the application to be in condition for allowance. However, should the examiner believe issues remain, the below signed representative would appreciate, and requests, a telephone interview to facilitate a resolution.

## **CONCLUSION**

Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

Respectfully submitted,

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